

STARS ACADEMY LAHORE

Head office: 590-Q Main Boulevard, Johar Town Lahore, 0321-9432186, 0321-4693044, www.stars.edu.pk



STARS

STARS ENTRY TEST SYSTEM-2018

MDCAT

F

Time Allowed: 40min

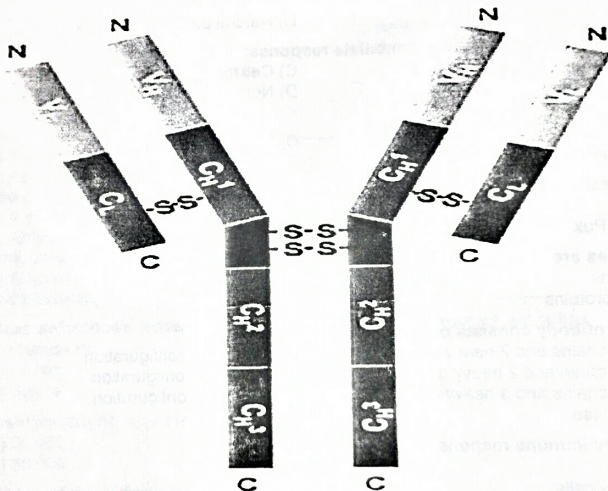
Test Code : B4

1. **Organisms belonging to phylum arthropoda are?**
A) Diploblastic
B) Monoblastic
C) Triploblastic
D) Deuterostomes
2. **Sleeping sickness is spread by?**
A) Anopheles
B) House fly
C) Tse tse fly
D) Honey bee
3. **The exoskeleton of arthropods is in the form of an outer covering the procuticle which is formed chiefly of**
A) Silica
B) Calcium carbonates
C) Chitin
D) Lignin
4. **The body cavity of arthropods is called:**
A) Blastocoel
B) Hetroocoel
C) Haemocoel
D) Spongocoel
5. **The most common arthropods, on the earth are:**
A) Crustaceans
B) Myriapods
C) Arachnids
D) Insects
6. **Coelom is cavity present between body wall and alimentary canal and is lined by?**
A) Ectoderm
B) Endoderm
C) Mesoderm
D) Choanoderm
7. **Which of the following endoparasite is found in small intestine?**
A) Dugseia
B) Hook worms
C) Pin worms
D) Fasciola hepatica
8. **shistosoma is known as?**
A) Liver fluke
B) Blood fluke
C) Ship fluke
D) All
9. **The name platyhelminthes means:**
A) Round worms
B) Segmented worms
C) Flatworms
D) Shipworm
10. **Which of these develops from the endoderm?**
A) Nervous system
B) Lining of gut
C) Reproductive system
D) Skeleton
11. **Pseudocoelom of round worms consists of a number of vacuolated cells filled with a protein rich fluid that develops high?**
A) Osmotic pressure
B) Partial pressure
C) Diffusion pressure
D) Hydrostatic pressure
12. **Ascaris lumbricoides is a intestinal parasite of:**
A) Horse
B) Donkey
C) Man
D) Monkey
13. **Anchyllostoma duodenale is commonly known as:**
A) Ship worm
B) Tape worm
C) Hook worm
D) Pin worm
14. **Germinal layers found in all animals**
A) Ectoderm and mesoderm
B) Mesoderm and endoderm
C) mesoglea and ectoderm
D) ectoderm and endoderm
15. **Pseudocoelom is derived from the hollow space, blastocoel, situated in the:**
A) Gastrula
B) Neurula
C) Blastula
D) Morulla

16. The nematode are commonly known as:
 A) Round worm C) Flatworm
 B) Pointed ends D) Blunt ends
17. *Dugesia, fasciola and taenia* are common examples of:
 A) Round worms C) Flatworms
 B) Segmented worms D) Pinworm
18. The excretory system of platyhelminthes consists of branching tubes ending in bulb-like cells, the:
 A) Flame cells C) Fire cells
 B) Bowman cells D) Blaze cells
19. in deuterostomes, blastopore develops into?
 A) Anus C) Both anus and mouth
 B) Mouth D) Coelom
20. Which one of the following is not insect
 A) Wasps C) Beetles
 B) House fly D) Daphnia
21. Nematods are included in group
 A) Deuterostomia C) Proterostomia
 B) Bilateria D) Radiata - Proterostomia
22. The scientific name of Pinworm is _____ and included in phylum _____.
 A) *Taenia solium*, Platyhelminthes C) *Acylostoma duodenale*, Nematoda
 B) *Ascaris Lumbricoidis*, Nematoda D) *Enterobius Vermicularis*, Aschelminthes
23. The one which have organisms abundantly found on earth?
 A) Annelids C) Molluscs
 B) Arthropods D) Echinoderms
24. Integumentary system is developed from
 A) Ectoderm C) Mesoderm
 B) Endoderm D) Hypodermis
25. Most arthropods possess an extensive system formed of air tubes called trachea for the exchange of:
 A) Water C) Food
 B) Gases D) Minerals
26. A single rotting apple may contain how many worms
 A) 30,000 C) 90,000
 B) 60,000 D) 100,000
27. Which of the following is Pseudocoelomates
 A) Flatworms C) Annelids
 B) Round worms D) Porifera
28. Worms can removed by
 A) Anema C) Surgery
 B) Drugs D) All methods can be used
29. Secondary host of *Fasciola hepatica* is
 A) Sheep C) Snail
 B) Man D) Pig
30. Which one is not adaptation for parasitic mode of life of platyhelminthes
 A) Absence of epidermis C) Developed a complicated reproductive system
 B) Simplified digestive system D) Developed muscular system
31. The main parts of the proglottids of worms are
 A) Excretory organs C) Reproductive organs
 B) Digestive organs D) Nervous system
32. The systems which is absent in Round worms?
 A) Nervous system C) Transport system
 B) Digestive system D) A and B
33. In coelenterates which of the following germinal layer is present
 A) Ectoderm C) Mesoderm
 B) Endoderm D) Both A & B
34. Components of immune system are not
 A) B-lymphocytes C) Anti bodies
 B) T-lymphocytes D) None of these

35. **Thymus gland is essential in the development of**
 A) All lymphocytes
 B) T lymphocytes
 C) B lymphocytes
 D) Antibodies
36. **Light chains and heavy chains are joined by**
 A) Covalent bond
 B) Hydrogen bond
 C) Di-sulphide bond
 D) Ionic bond
37. **Which character of taenia makes its removal difficult**
 A) reproduction
 B) Immobility
 C) Regeneration
 D) attachment
38. **Which one may be foreign particle?**
 A) Antigen
 B) Antibody
 C) Immunogen
 D) Both a & c
39. **Simplest of eumetazoans are**
 A) Poriferans
 B) Actinopods
 C) annelids
 D) cnidarians
40. **The use of vaccine which stimulate the production of antibodies in the body**
 A) Natural Active immunity
 B) artificial Passive immunity
 C) artificial active immunity
 D) Natural passive immunity
41. **which of the following show immediate response:**
 A) Active immunity
 B) Passive immunity
 C) Cell mediated response
 D) None of these
42. **Antibodies are manufactured in:**
 A) T Lymphocytes cell
 B) B Lymphocytes cells
 C) Lymphocytes
 D) None of these
43. **After vaccination once in life we safe from:**
 A) Polio
 B) Small Pox
 C) HIV
 D) All of these
44. **Antibodies are**
 A) Proteins
 B) Glycoproteins
 C) Carbohydrates
 D) nucleic acid
45. **Typical antibody consists of**
 A) 2 light chains and 2 heavy chains arranged in a Y-shaped configuration
 B) A light chain and 2 heavy chains arranged in a Y-shaped configuration
 C) 2 light chains and a heavy chain arranged in a Y-shaped configuration
 D) all of these
46. **Secondary immune response is generated due to**
 A) B cells
 B) Memory cells
 C) T cells
 D) NK cells
47. **Vaccines used against viral infections are**
 A) Measles and Mumps vaccine
 B) Cholera vaccine
 C) Typhoid vaccine
 D) Anti-rickettsial vaccine
48. **_____ is not first line barrier**
 A) Skin
 B) Saliva
 C) Gastric
 D) Blood
49. **The method of passive immunization is not used to combat active infections of:**
 A) Polio
 B) HAV
 C) Snake bite
 D) All of these
50. **Which of the following form plasma cell clone?**
 A) T cell
 B) B cell
 C) Both A & B
 D) Macrophages
51. **Immunity can be transferred from one body to another body by transferring**
 A) immunogens
 B) Antibodies
 C) Antigens
 D) A+C
52. **Which of the following is example of natural passive immunity:**
 A) Colostrums
 B) Antibodies injections
 C) Antiserum
 D) All of these

53. Tapeworm remain embedded in the form of cyst in _____ of cow.
 A) cardiac muscle
 B) smooth muscle
 C) voluntary muscle
 D) involuntary muscle
54. HIV attacks
 A) T helper cells
 B) T cytotoxic cells
 C) B cells
 D) Macrophages
55. The immunity acquired by inoculation of living organism of attenuated virulence is
 A) Artificial active immunity
 B) Passive immunity
 C) Natural active immunity
 D) innate immunity
56. Innate immunity is
 A) Specific
 B) Non-specific
 C) Active
 D) Passive
57. In following figure how many disulphide bridges are found in heavy and light chains



58. In above figure how many variable regions heavy chains have
 A) One
 B) Two
 C) Three
 D) Four
59. Acquired immunity can be developed by
 A) Natural means
 B) Artificial means
 C) Both A and B
 D) None of these
60. The digestive system with two openings is found in
 A) planaria
 B) Liver fluke
 C) Ascaris lumbricoides
 D) Schiastostoma

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Roll No. of Candidate

Name of Candidate

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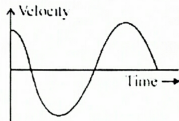
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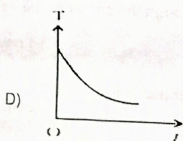
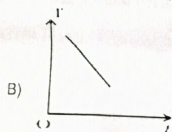
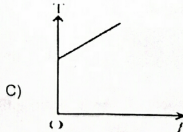
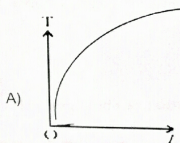
- An electric motor of 12 horse-power generates an angular velocity of 125 rad/s. What will be the frequency of rotation?
A) 20
B) $20/\pi$
C) $20/2\pi$
D) 40
- The ratio of angular speeds of seconds hand and hour hand of a watch is
A) 1 : 720
B) 60 : 1
C) 1 : 60
D) 720 : 1
- A body moves with constant angular velocity on a circle. Magnitude of angular acceleration is
A) rw^2
B) constant
C) zero
D) rw
- A wheel having a diameter of 3 m starts from rest and accelerates uniformly to an angular velocity of 210 r.p.m. in 5 seconds. Angular acceleration of the wheel is
A) 4.4 rad s^{-2}
B) 3.3 rad s^{-2}
C) 2.2 rad s^{-2}
D) 1.1 rad s^{-2}
- If a particle moves in a circle describing equal angles in equal intervals of time, the velocity vector
A) remains constant.
B) changes in magnitude only.
C) changes in direction only.
D) changes both in magnitude and direction
- Which of the following is an axial vector?
A) Torque
B) Angular Displacement
C) Angular Velocity
D) All of these
- A particle of mass 1 kg is revolved in a horizontal circle of radius 1 m with the help of a string. If the maximum tension the string can withstand is $16\pi^2 \text{ N}$, then the maximum frequency with which the particle can revolve is
A) 3 Hz
B) 2 Hz
C) 4 Hz
D) 5 Hz
- Angle between radius vector and centripetal acceleration is
A) 0°
B) 90°
C) 180°
D) 45°
- The angular displacement in circular motion is
A) dimensional quantity.
B) dimensionless quantity.
C) unitless and dimensionless quantity.
D) unitless quantity.
- A flywheel rotates at a constant speed of 3000 r.p.m. The angle described by the shaft in one second is
A) $3\pi \text{ rad}$
B) $30\pi \text{ rad}$
C) $100\pi \text{ rad}$
D) $3000\pi \text{ rad}$
- What is the angular speed of the seconds hand of a watch?
A) 60 rad/s
B) $\pi \text{ rad/s}$
C) $\pi/30 \text{ rad/s}$
D) 2 rad/s
- A body of mass 100 g is revolving in a horizontal circle. If its frequency of rotation is 3.5 r.p.s. and radius of circular path is 0.5 m, the angular speed of the body is
A) 18 rad/s
B) 20 rad/s
C) 22 rad/s
D) 24 rad/s

13. A wheel has circumference C . If it makes " f " r.p.s., the linear speed of a point on the circumference is
 A) $2\pi fC$ C) $fC/2\pi$
 B) fC D) $fC/60$
14. A body is whirled in a horizontal circle of radius 20 cm. It has angular velocity of 10 rad/s. What is its linear velocity at any point on circular path?
 A) 10 m/s C) 20 m/s
 B) 2 m/s D) 2 m/s
15. A particle moves along a circular orbit with constant angular velocity. This necessarily means,
 A) its motion is confined to a single plane.
 B) its motion is not confined to a single plane.
 C) nothing can be said regarding the plane of motion.
 D) its motion is one-dimensional.
16. A mass of 5 kg is tied to a string of length 1.0 m and is rotated in vertical circle with a uniform speed of 4 m/s. The tension in the string will be 130 N when the mass is at ($g = 10 \text{ m/s}^2$)
 A) highest point C) bottom
 B) mid way D) cannot be justified
17. A can filled with water is revolved in a vertical circle of radius 4 m and water does not fall down. The time period of revolution will be
 A) 2 s C) 6 s
 B) 4 s D) 8 s
18. For SHM, which of the following becomes maximum at extreme position?
 A) K.E C) Velocity
 B) P.E D) None of these
19. An earth satellite is moving around the earth in a circular orbit. In this case, which of the following quantities is conserved?
 A) Velocity C) Angular momentum
 B) Linear Momentum D) Angular velocity
20. A body travelling in a circular path at constant speed
 A) Has a constant velocity C) has an inward acceleration
 B) is not accelerated D) has transverse acceleration
21. A satellite is revolving around the earth in a circular orbit of radius R . Its period of revolution varies as
 A) R^2 C) R
 B) $R^{3/2}$ D) $R^{1/2}$
22. Two satellites of mass M and $3M$ are revolving around the earth in circular orbits of radii $3R$ and R respectively. What is the ratio of their speeds?
 A) 3:1 C) $\frac{1}{\sqrt{3}}$:1
 B) $\sqrt{3}$:1 D) 1:1
23. On earth, weight of an object is maximum at:
 A) Equator C) Center of earth
 B) Poles D) None of these
24. Which of the following is a simple harmonic motion?
 A) Particle moving through a string fixed at both ends.
 B) Wave moving through a string fixed at both ends.
 C) Earth spinning about its axis.
 D) Ball bouncing between two rigid vertical walls.
25. Starting from extreme position, an object executes SHM such that it covers half of amplitude in 1 sec then time period of oscillator is:
 A) 4 s C) 8 s
 B) 6 s D) 12 s

26. A block of mass 4 kg is attached to a spring of $K=400 \text{ N/m}$ and is executing SHM with an amplitude of 6cm. If the block is at $X=6\text{cm}$ at $t=0$, then which of the following equation is correct?
- A) $X=6\sin(10t + \frac{1}{2}\pi)$ B) $X=6\sin(10\pi t)$
 C) $X=6\sin(10t - \frac{1}{2}\pi)$ D) $X=6\sin 10t$
27. Acceleration of a particle executing SHM, at its mean position is
 A) Infinity C) maximum
 B) variable D) zero
28. If an SHM is executed with frequency f , the frequency with K.E changes is:
 A) f C) $f/4$
 B) $f/2$ D) $2f$
29. A particle is executes S.H.M. having time period T , then the time period with which the potential energy changes is
 A) T C) $T/2$
 B) $2T$ D) ∞
30. If the magnitude of the displacement is numerically equal to that of acceleration, then the time period is
 A) 1 second C) 2π second
 B) π second D) 4π second
31. The graph shown in the figure represents



- A) motion of a simple pendulum starting from mean position
 B) motion of a simple pendulum starting from an extreme position
 C) Simple pendulum describing a horizontal circle
 D) None of these
32. The period of oscillation of a mass M suspended from a spring of negligible mass is T . If along with it another mass M is also suspended, the period of oscillation will now be
 A) T C) $2T$
 B) $T/\sqrt{2}$ D) $\sqrt{2}T$
33. A child is swinging on swing in sitting position stands up. The time period of the swing will.
 A) Increase
 B) decrease
 C) remain same
 D) Increase if the child is tall and decrease if the child is short
34. The graph of the time period (T) of simple pendulum versus its length (l) is



35. A simple pendulum has a metal bob, which is negatively charged. If it is allowed to oscillate above a positively charged metallic plate, then its time period will
 A) Increase C) become zero
 B) decrease D) remain the same
36. A pendulum is undergoing S.H.M. The velocity of the bob in the mean position is v . If now its amplitude is doubled, keeping the length same, its velocity in the mean position will be
 A) $v/2$ C) $2v$
 B) v D) $4v$
37. A particle moves such that its acceleration 'a' is given by $a = -bx$ where x is the displacement from equilibrium position and b is constant. The period of oscillation is
 A) $2\pi/b$ C) $\sqrt{2\pi/b}$
 B) $2\pi/\sqrt{b}$ D) $2\sqrt{\pi/b}$
38. Distance covered during one vibration of an oscillating body in terms of amplitude A is:
 A) Zero C) $2A$
 B) A D) $4A$
39. The tension in the string of a simple pendulum is
 A) Remains Constant C) zero in mean position
 B) maximum in extreme position D) maximum at mean position
40. Displacement covered during one vibration of an oscillating body in terms of amplitude A is:
 A) Zero C) $2A$
 B) A D) $4A$
41. Resonance is an example of
 A) Tuning fork C) free vibration
 B) forced vibration D) damped vibration
42. The total mechanical energy of a spring-mass system in simple harmonic motion is $E = \frac{1}{2} m \omega^2 A^2$. Suppose the oscillating particle is replaced by another particle of double the mass while the amplitude A remain the same. The new mechanical energy will
 A) Become $2E$ C) Become $\sqrt{2}E$
 B) Become $E/2$ D) remains same
43. What fraction of total energy is kinetic at half of amplitude during SHM?
 A) $1/2$ C) $2/3$
 B) $1/4$ D) $3/4$
44. A body of mass 5 kg is executing S.H.M about a fixed point O with an amplitude of 10 cm , its maximum velocity is 100 cm/s . Its velocity will be 50 cm s^{-1} at a distance (in cm)
 A) 5 C) $5\sqrt{3}$
 B) $5\sqrt{2}$ D) $10\sqrt{2}$
45. Maximum acceleration of an object in SHM is 24 m/s^2 and maximum velocity is 16 m/s . The amplitude of SHM is
 A) $\frac{3}{2} \text{ m}$ B) $\frac{2}{3} \text{ m}$
 C) $\frac{32}{3} \text{ m}$ D) $\frac{3}{32} \text{ m}$
46. A tunnel has been dug through the center of the earth and a ball is released in it. It executes S.H.M. with time period
 A) 42 minutes C) 1 hour
 B) 1 day D) 84.6 minutes
47. At resonance, the energy transfer becomes:
 A) Minimum C) Zero
 B) Maximum D) Negative

48. The length of a second's pendulum at the surface of earth is 1m. The length of the second's pendulum at the surface of moon where g is $1/6$ th that at earth's surface is
- A) $1/6$ m
B) 6 m
C) $1/36$ m
D) 36 m

The displacement of a S.H.M. doing particle when $K.E. = P.E.$ (amplitude = 4 cm) is

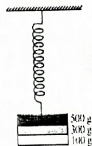
- A) $2\sqrt{2}$ cm
B) 2 cm
C) $\frac{1}{\sqrt{2}}$ cm
D) $\sqrt{2}$ cm
50. A simple pendulum has its time period 't' Its time period in a lift which is moving upwards with acceleration 3 ms^{-2} is

- A) $t\sqrt{\frac{9.8}{12.8}}$
B) $t\sqrt{\frac{12.8}{9.8}}$
C) $t\sqrt{\frac{9.8}{6.8}}$
D) $t\sqrt{\frac{6.8}{9.8}}$

51. Time period of second pendulum on surface of moon is:
- A) 2 s
B) 2×6 s
C) $1/6$ s
D) $2/6$ s

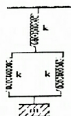
52. Three masses of 500g, 300g and 100 gram are suspended at the end of a spring as shown, and are in equilibrium. When the 500 g mass is removed, the system oscillates with a period of 2 second. When the 300 g mass is also removed, it will oscillate with a period of

- A) 2s
B) 4s
C) 8s
D) 1s



53. If the mass shown in the figure is slightly displayed and then let go, then the system shall oscillate with a time period of

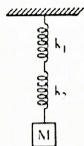
- A) $2\pi\sqrt{\frac{m}{3k}}$
B) $2\pi\sqrt{\frac{3m}{2k}}$
C) $2\pi\sqrt{\frac{3m}{2k}}$
D) $2\pi\sqrt{\frac{3k}{m}}$



54. Which of the following becomes maximum at mean position?
- A) P.E
B) Acceleration
C) Displacement
D) K.E

55. The time period of the oscillating system (see figure) is

- A) $T = 2\pi\sqrt{\frac{m(k_1+k_2)}{k_1k_2}}$
B) $T = 2\pi\sqrt{\frac{m(k_1+k_2)}{k_1-k_2}}$
C) $T = 2\pi\sqrt{\frac{m(k_1k_2)}{k_1+k_2}}$
D) $T = 2\pi\sqrt{\frac{m(k_1k_2)}{k_1-k_2}}$



56. The amplitude and time period of SHM are x_0 and T respectively. The time taken by it in displacing from $x = 0$ to $x = \frac{x_0}{2}$ will be

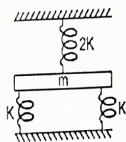
- A) T
B) $T/4$
C) $T/12$
D) $T/6$

57. The product of frequency and time period is:
 A) 0
 B) 2π
 C) π
 D) 1

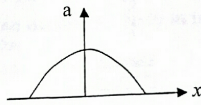
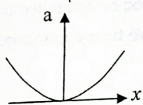
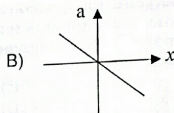
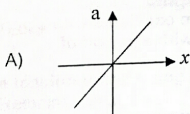
58. The spring constant form adjoin combination of spring is

A) K
 B) $2K$

C) $4K$
 D) $5K/2$



59. Which graph Correctly represents the variation of acceleration a with displacement x for a body moving in SHM.



60. A simple pendulum is attached to the root of a lift has a root of time period of 2s in a stationary lift. If the lift is allowed to fall freely the frequency of oscillations of pendulum will be
 A) Zero
 B) 2 Hz
 C) 0.5 Hz
 D) infinity

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Re-conduct

Time Allowed: 30min

ENGLISH TEST

Choose the correct word words to complete each sentence.

- The _____ orders of the boss were ignored and the employee went on to corrupt the minds of other colleagues, too.
A) Disingenuous
B) Dictated
C) Duplicious
D) Droll
- The door attendant at the farewell party has _____ discretion over who can and who cannot enter the hall.
A) Electrolytes
B) Evanescent
C) Dexter
D) Discretion
- You need to continue the pruning and trimming of bushes and _____ trees, and the destruction of virulent insects.
A) Espalier
B) Euphonious
C) Arboreal
D) Epicenter
- The politicians often back out of their pledges since they _____ in public gatherings and the dual meanings are often elusive to the audience.
A) Empower
B) Equivocate
C) Enhance
D) Eschew

SPOT THE ERROR: In the following sentences some segments of each sentence are underlined. Your task is to identify that underlined segment of the sentence, which contains the mistake that needs to be corrected. Fill the circle corresponding to that letter under the segment in the MCQ Response Form.

- I couldn't get admission in medical college because I was much complacent with my studies.
A B C D
- The child was fairly eating me over with her cold, steady eyes, and no expression on her face whatever.
A B C D
- I saw a black turtle in the Lahore zoo whose carapace was harder than any turtle.
A B C D
- He thought of the Gulistan as one of the bible of the world, for he found in it the universality of moral law.
A B C D
- The new policy is more preferable to the previous one.
A B C D
- Of Ali and Akram, the later is a man of words and never eats his own words.
A B C D
- Most evergreens have needle-like leaves that require least water than regular leaves.
A B C D
- Perhaps, Mr. Aslam is the eldest member in our group.
A B C D
- Only the concerning people should attend the meeting.
A B C D

14. The mangoes of my garden are sweeter than your garden.

A

B

C

D

In each of the following questions, four alternative sentences are given. Choose the CORRECT one and fill the circle corresponding to that letter in the MCQ Response Form.

- 15.
- A) This piece of land is more desiccated than the other tract of land on the other side.
 - B) This piece of land is desiccated than the other tract of land on the other side.
 - C) This piece of land is the most desiccated than the other tract of land on the other side.
 - D) This piece of land is most desiccated than the other tract of land on the other side.
- 16.
- A) This is the most evasive puzzle I have ever listened about.
 - B) This is most evasive puzzle I have ever listened about.
 - C) This is more evasive puzzle I have ever listened about.
 - D) This is a evasive puzzle I have ever listened about.
- 17.
- A) The voice of Abrar is as dulcet as, if not more dulcet than that of Atif Aslam.
 - B) The voice of Abrar is as dulcet as, if not more dulcet than Atif Aslam.
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- A) What he elucidates in the class is far less comprehensive from the lectures of other teacher.
 - B) What he elucidates in the class is very less comprehensive than the lectures of other teacher.
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 - D) What he elucidates in the class is much less comprehensive than the lectures of other teacher.
- 19.
- A) The philosophy of Hemingway is far more elusive than that of any thinker.
 - B) The philosophy of Hemingway is far more elusive than that of any other thinkers.
 - C) The philosophy of Hemingway is far more elusive than any other thinker's.
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- 20.
- A) The docent tells his class that days in Multan are either hotter or less hot than those in Rawalpindi.
 - B) The docent tells his class that days in Multan are either hotter or less hotter than those in Rawalpindi.
 - C) The docent tells his class that days in Multan are either hotter or little hot than those in Rawalpindi.
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- 21.
- A) The question given in the paper was very difficult to solve that I had to consult my friend sitting in front of me.
 - B) The question given in the paper was too difficult to solve that I had to consult my friend sitting in front of me.
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- 22.
- A) If only they wouldn't have use the word "hurt" I might be able to get anywhere.
 - B) If only they wouldn't use the word "hurt" I might be able to get somewhere.
 - C) If only they wouldn't use the word "hurt" I might be able to get anywhere.
 - D) If only they wouldn't have use the word "hurt" I might be able to get somewhere.

Choose the correct sentence out of four sentences given below

23.

- (a) Of the two evils choose the least one.
- (b) Of the two evils choose the little one.
- (c) Of the two evils choose the fewer one.
- (d) Of the two evils choose the lesser one.

24. (a) He is leading a luxurious life.
(b) He is leading a luxuriant life.
(c) He is leading luxurious life
(d) He is leading the luxurious life.
25.
(a) I have never seen a most worse situation than this.
(b) I have never seen a more worse situation than this.
(c) I have never seen a much worse situation than this.
(d) I have never seen a worst situation than this.
26.
(a) People say that Mauritius is place worth-seeing.
(b) People say that Mauritius is worth-seeing place.
(c) People say that Mauritius is a place worth-seeing.
(d) People say that Mauritius is a worth-seeing place.
27.
(a) This house is too much big for you and your family.
(b) This house is very much big for you and your family.
(c) This house is much too big for you and your family.
(d) This house is too much bigger for you and your family.
28.
(a) He is the richest and most charitable man in this city.
(b) He is the richest and a charitable man in this city.
(c) He is the richest and the charitable man in this city.
(d) He is the rich and a charitable man in this city.
29.
(a) He had no any money to buy a book.
(b) He had no money to buy a book.
(c) He had no some money to buy a book
(d) He had any money to buy a book
30.
a. If he had taken into account the instruction of his father, he would not go astray.
b. If he had taken into account, his father's instruction, he would not have gone astray.
c. If he would have taken into account the instruction of his father, he would not have gone astray.
d. If he had taken into account the instruction of his father, he would not have gone astray.

STARS ACADEMY LAHORE

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STARS STARS ENTRY TEST SYSTEM-2018 MDCAT

Test Code : E4

Time Allowed: 30min

ENGLISH TEST

Choose the correct word words to complete each sentence.

- The _____ orders of the boss were ignored and the employee went on to corrupt the minds of other colleagues, too.
A) Disingenuous
B) Dictated
C) Duplicious
D) Droll
- The door attendant at the farewell party has _____ discretion over who can and who cannot enter the hall.
A) Electrolytes
B) Evanescent
C) Dexter
D) Discretion
- You need to continue the pruning and trimming of bushes and _____ trees, and the destruction of virulent insects.
A) Espalier
B) Euphonious
C) Arboreal
D) Epicenter
- The politicians often back out of their pledges since they _____ in public gatherings and the dual meanings are often elusive to the audience.
A) Empower
B) Equivocate
C) Enhance
D) Eschew

SPOT THE ERROR: In the following sentences some segments of each sentence are underlined. Your task is to identify that underlined segment of the sentence, which contains the mistake that needs to be corrected. Fill the circle corresponding to that letter under the segment in the MCQ Response Form.

- I couldn't get admission in medical college because I was much complacent with my studies.
A B C D
- The child was fairly eating me over with her cold, steady eyes, and no expression on her face whatever.
A B C D
- I saw a black turtle in the Lahore zoo whose carapace was harder than any turtle.
A B C D
- He thought of the Gulistan as one of the bible of the world, for he found in it the universality of moral law.
A B C D
- The later part of the movie, Malick, is exactly emblematic of what is happening in Karachi.
A B C D
- If there is a more chimerical story in the world of fiction, I do not know what it would be
A B C D

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 - D) If only they wouldn't have use the word "hurt" I might be able to get somewhere.
19.
 - ☒ A) His command on English language is unusually supreme and most delicate.
 - B) His command in English language is unusually most supreme and most delicate.
 - C) His command on English language is unusual supreme and most delicate
 - D) His command in English language is unusually most supreme and most delicate.
20.
 - A) "Pay for the salt", said the king, "lest it shall become a custom and the village be ruined."
 - B) "Pay for the salt", said the king, "lest it would become a custom and the village be ruined."
 - ☒ C) "Pay for the salt", said the king, "lest it should become a custom and the village be ruined."
 - D) "Pay for the salt", said the king, "lest it could become a custom and the village be ruined."

21. **EXCAVATE**

- A) Inoculate
☒ B) Mine

- C) Dwindle
 D) Abrasion

22. **EUPHONIOUS**

- A) Mellifluous
 B) Looming

- C) Propitiating
 D) Thorax

23. **DISSONANCE**

- A) Odometer
 B) Perimeter

- C) Incongruity
 D) Frothy

24. **ESCHEW**

- A) Taboo
 B) Unkempt

- C) Posy
 D) Abstain

25. **ENNUI**

- A) Carbonated
 B) Immolate

- C) Langour
 D) Spruce

26. **DROLL**

- A) Torment
 B) Funny

- C) Tariff
 D) Tertiary

27. **DIVAGATE**

- A) Deviate
 B) Reconnoiter

- C) Precipitate
 D) Fabricate

28. **DISCREPENCY**

- A) Felicity
 B) Sanatorium

- C) Picas
☒ D) Disparity

29. **DIFFIDENCE**

- A) Hector
 B) Supination

- C) Reticence
 D) Stipulate

30. **DISDAIN**

- A) Pleat
 B) Tenacious

- C) Contempt
 D) Torpid

1. Which of the following molecule has trigonal planar shape?



2. The strongest Bond among the following is



3. All are Lewis acid except:



4. Which of the following compound has sp^3 hybridization:



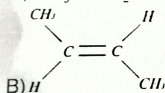
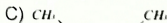
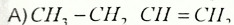
5. The chemical species having smallest bond angle:



6. Which of the following has distorted tetrahedral structure?



7. Which of the following compound have maximum dipole moment?



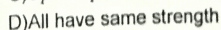
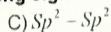
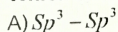
8. CO_2 is isostructural with.



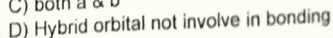
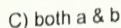
9. Which one show positive deviation from octet rule:



10. Which one of the following can form strong sigma bond?



11. Hybrid orbital can form:



12. Which one of the following contain all types of bonds?
 A) NH_4Cl C) HCl
 B) $NaCl$ D) $AlCl_3$
13. Total number of valence electron of nitrogen in ammonium ion is:
 A) 6 C) 16
 B) 10 D) 8
14. The maximum covalent character is possessed by:
 A) $NaCl$ C) $LiCl$
 B) $CsCl$ D) KCl
15. When the Electronegativity difference b/w two bonded atom is 1.7 then the percentage of ionic character is
 A) 100% C) 72%
 B) 50% D) 92%
16. Which of the following compound has non-directional bond?
 A) BF_3 C) KBr
 B) $AlCl_3$ D) NF_3
17. Sulphur shows its valency of six in SF_6 which can be explained on the basis of
 A) Small size of sulphur atom C) Presence of empty d-orbitals
 B) Electron affinity D) Electro negativity
18. Which one of the following contain 100% ionic character?
 A) $NaCl$ C) NaF
 B) CsF D) No one contain 100% ionic character
19. The number of unpaired electron in NH_3 :
 A) 0 C) 3
 B) 1 D) 4
20. How many pure covalent bonds in N^+H_4 ion:
 A) 0 C) 3
 B) 1 D) 4
21. sp^2 hybridization can explain which of the following system of VSEPR:
 A) AB_2 C) AB_4
 B) AB_3 D) VSEPR is not related to hybridization
22. Which one of the following contain maximum electronic repulsion?
 A) CH_4 C) H_2O
 B) NH_3 D) $SiCl_4$
23. Bond will be ionic when Electronegativity difference of bonded atom
 A) Equal to or less than 1.7 C) Greater than 1.7
 B) Less than 1.7 D) No specificity exists
24. Molecule in which σ bond is formed by overlap p and p orbitals
 A) H_2 C) F_2
 B) HF D) CH_4
25. A covalent bond with respect to its formation may be:
 A) 100% covalent C) 100% ionic
 B) Partial ionic D) Both a and b
26. In which of the following molecules would you expect the nitrogen to nitrogen bond to be the shortest?
 A) N_2H_4 C) N_2O_4
 B) N_2 D) N_2O
27. The number of sigma electrons in ethene are:
 A) 5 C) 4
 B) 10 D) 8

28. Point out the shape and bond angles present in Boron trifluoride:

	Shape	Bond angle
A)	Triangular pyramidal	107°
B)	Tetrahedral	109.5°
C)	Triangular planar	120°
D)	Triangular pyramidal	120°

29. _____ pair of molecules will have similar shape:

- A) SO_3 and PCl_3 C) CO_2 and SO_2
 B) CdCl_2 and SnCl_2 D) BF_3 and SO_3

30. Which of the following has different molecular geometry and electron pair geometry?

- A) SO_3 C) CO_2
 B) SnCl_2 D) BF_3

31. Which of the following molecule has highest dipole moment

- A) SO_3 C) CO_2
 B) SnCl_2 D) BF_3

32. Which compound is more ionic?

- A) HF C) NaCl
 B) CsCl D) H_2O

33. Structure of NH_3 resembles with:

- A) H_3O^+ C) BF_3
 B) N^+H_4 D) SO_2

34. Chemical reactivity depends:

- A) Atomic No. C) Electronic configuration
 B) Atomic ion D) All

35. The most important application of bond energy:

- A) Comparing the strength of bond C) estimating enthalpy change
 B) Understanding structure & bonding D) Understanding mechanism

36. Select the correct order with respect to the strength:

- A) ionic bond > metallic bond C) ionic bond = metallic bond
 B) ionic bond < metallic bond D) Not related

37. Both BF_3 and NF_3 are covalent but BF_3 molecule is non-polar while NF_3 is polar because

- A) atomic size of boron is smaller than nitrogen
 B) BF_3 is planar but NF_3 is Pyramidal
 C) Boron is a metal while Nitrogen is gas
 D) BF bond has no dipole moment while NF bond has dipole

38. Which of the following molecules has a maximum dipole moment?

- A) Benzene C) Para xylene
 B) Meta xylene D) Ortho xylene

39. Bond energy is increases by all of the following except

- A) %age of s character C) Difference of E.N value
 B) Bond order D) Bond Length

40. Shape of SnCl_2 is similar to

- A) CO_2 C) HgCl_2
 B) BeCl_2 D) SO_2

41. An ionic compound A^+B^- is most likely to be formed when;

	Ionization Energy of A	Electron Affinity of B
A)	high	low
B)	low	high
C)	high	high
D)	low	low

42. Which of the following has not tendency to form coordinate covalent bond with H^+ ?

- A) NH_3 C) BF_3
 B) H_2O D) CH_3OH

43. Which one is non-polar although it contains polar bonds
 A) HCl
 B) H_2O
 C) SO_3
 D) SO_2
44. When 's' character of hybridized orbitals decreases the bond angle:
 A) Decreases
 B) Increases
 C) Becomes zero
 D) Does not change
45. Which of the following theory explain ionic bond?
 A) VSEPR theory
 B) VBT
 C) MOT
 D) None of these
46. A molecule in which the central atom has two lone pair and two bond pairs. The expected geometry will be:
 A) Trigonal planar
 B) Tetrahedral
 C) Angular
 D) square planar

47. A chemical bond is formed to:

1. attain the octet state
2. minimize energy
3. gain stability
4. decrease reactivity

Which statements are correct.

- A) 1 and 2 only
 B) 1, 2, 3 and 4 are all correct
 C) 1, 2 and 3 only
 D) 2, 3 and 4 only

48. Which one has max polarizability:

- A) Al^{+3}
 B) Ba^{+2}
 C) Mg^{+2}
 D) Na^{+1}

49. Which one of the following molecules is not planar?

- A) Benzene
 B) Phosphorus trichloride
 C) ethene
 D) Boron trifluoride

50. Which of the following molecules contain six bonding electrons?

- A) C_2H_4
 B) CO_2
 C) H_2S
 D) PCl_3

51. In which of the following compounds, the underlined element does not have eight electrons in the outer shell

- A) Li_2O
 B) H_2O_2
 C) PCl_3
 D) PCl_5

52. When heated, solid iodine readily forms iodine vapours. What does this information suggest about the nature of the particles in these two physical states of iodine?

	Solid	Vapour
A)	ionic	atomic
B)	ionic	molecular
C)	Molecular	atomic
D)	Molecular	molecular

53. All of the following contain sp^3 hybridization.

- A) CH_3^-
 B) AlF_3
 C) CH_3^+
 D) Both 'b' and 'c'

54. In which sequence are the molecules quoted in order of increasing bond angle with in the molecule.

- A) H_2O , SF_6 , BF_3
 B) H_2O , NH_3 , CH_4
 C) H_2O , CO_2 , BF_3
 D) CO_2 , H_2O , BF_3

55. The ratio of π and σ bonds in benzene is

- A) 1 : 2
 B) 1 : 4
 C) 1 : 6
 D) 3 : 6

56. Hybridization of 1 and 2 carbon atom in ${}^1CH_2 = {}^2C = CH_2$ are

- A) sp , sp
 B) sp^2 , sp^2
 C) sp^2 , sp
 D) sp^3 , sp^2

57. The halide having the highest melting point is

- A) NaF
B) NaCl
C) NaBr
D) NaI

58. Which one of the following molecule has the smallest bond angle?

- A) H_2O
B) NH_3
C) H_2Se
D) H_2S

59. Which of the following represents the lewis structure of N_2 molecule?

- A) $\text{x} \text{N} \equiv \text{N} \text{x}$
B) $\text{x} \text{N} \equiv \text{N} \text{x}$
C) $\text{x} \text{N} \rightarrow \text{N} \text{x}$
D) $\text{x} \text{N} \equiv \text{N} \text{x}$

60. The strongest bond is

- A) $\text{C} = \text{C}$
B) $\text{C} \equiv \text{C}$
C) $\text{C} - \text{C}$
D) $\text{C} = \text{O}$